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In the Claims

1-33. (Canceled)

- 1 34. (Currently Amended) A digital micro-mirror device projection system for
2 outputting a stereoscopic encoded optical signal comprising
3 3D data formatter for accepting input stereoscopic image signals having an input
4 frame rate, processing said input signals, and providing an output signal characterized by
5 an-a self synchronized output frame rate independent of and decoupled from the input
6 frame rate,
7 wherein said self synchronized output frame rate is predetermined or set
8 by a user;
9 a digital micro-mirror device data formatter for receiving an input stereoscopic
10 image and control signal at the output frame rate generated by the 3D data formatter, and
11 for outputting an output stereoscopic image and control signal including
12 color wheel control signals indicative of rotation rate;
13 output digital micro-mirror device data indicative of micro-mirror
14 switching rates;
15 ~~optionally 3D field signal for synchronization with an optional active~~
16 ~~rotator of a 3D encoder sub-system;~~
17 wherein said color wheel control signal, output digital micro-mirror device
18 data and optional 3D field signal are synchronized based on the output frame rate
19 generated by the 3D data formatter;
20 said digital micro-mirror device data formatter comprising
21 a dual port memory controller that converts input stereoscopic

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22 image and control signal at the output frame rate from a full color image
23 into an image stream having serial individual color images synchronized
24 to the rotation of the color wheel based on the output frame rate;
25 a memory device;
26 a digital micro-mirror device data converter for formatting data
27 into a format readable by a digital micro-mirror chip;
28 a micro-controller for setting the register values of the dual port
29 memory controller based on the 3D format and sets the optional 3D field
30 signal;
31 an illumination source including
32 a lamp for transmitting light to condensing optics, light from said
33 condensing optics being transmitted to a rotating color wheel,
34 the rotating color wheel coupled to digital micro-mirror device
35 data formatter for receiving color signal data indicative of rotation rate
36 synchronized based on the output frame rate generated by the 3D data formatter;
37 a digital micro-mirror chip receiving the output digital micro-mirror device data
38 synchronized with the output frame rate generated by the 3D data formatter from the
39 digital micro-mirror device data formatter and reflecting, from micro-mirrors of the
40 digital micro-mirror chip, light received from said color wheel;
41 a 3D encoder system having a first 3D encoder sub-system integrated with said
42 color wheel, said 3D encoder system synchronized with the output frame rate generated
43 by the 3D data formatter; and
44 projection optics for projecting light reflected from said digital micro-mirror chip.

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- 1 35. (Previously Presented) A stereoscopic projection system comprising the
2 digital micro-mirror device projection system as in claim 34 and an optical decoder for
3 allowing a viewer to perceive stereoscopic images.
- 1 36. (Previously Presented) The stereoscopic projection system as in claim 35,
2 wherein the optical decoder comprises passive polarizing lenses having one polarization
3 state corresponding to one eye and another polarization state corresponding to another
4 eye.
- 1 37. (Previously Presented) The stereoscopic projection system as in claim 35,
2 wherein the optical decoder comprises active shutter glasses.
- 1 38. (Currently Amended) The digital micro-mirror device projection system as in
2 | claim ~~134~~, wherein said self synchronized output frame rate is set or selected to reduce
3 | appearance of flicker.
- 1 39. (Previously Presented) The digital micro-mirror device projection system
2 as in claim 1, wherein the output signal of the 3D data formatter is Color Sequential
3 stereoscopic data.
- 1 40. (Currently Amended) The digital micro-mirror device projection system as in
2 | claim ~~134~~, wherein the output signal of the 3D data formatter is Frame Sequential
3 | stereoscopic data.
- 1 41-48. (Canceled)